REMARKS

The only issue outstanding in the final rejection of February 25, 2010, is the rejection under 35 U.S.C. 112 of solely claims 17 and 19. Reconsideration of this issue, in view of the following discussion, is respectfully requested. The Examiner is thanked for indicating the allowance of claims 1-11, 13 and 15.

Rejections Under 35 U.S.C. 112

Claims 17 and 19 remain rejected under 35 U.S.C. 112, first paragraph. It is argued, at page 2 of the office action, that the specification, while it enables methods of treating depression, does not provide enablement for any other diseases listed in these claims. Applicants again respectfully disagree with this analysis.

It is argued at page 2 of the office action that applicants' position is that "inoperative embodiments are interpreted to be *per se* functional." In fact, this is a misstatement. Applicants have stated the law that "method claims" are *per se* functional, and do not include inoperative embodiments. Again, see *In re Angstadt*, 537 F.2d 498, 190 USPQ 214 (CCPA 1976). To the extent that a given compound would not be operative to treat a given indication, this is accordingly not fatal to enablement, inasmuch as such compounds and indication would not be included within the scope of the inherently functional method claim. The question, in this situation, would be whether it is undue experimentation for one of ordinary skill in the art to determine the metes and bounds of the claim. Applicants have previously argued that this would not be the case inasmuch as one of ordinary skill in the art can routinely assay agonism or antagonism for 5-HT_{1d} receptors, as well known in the art. See page 8 of applicants prior reply. Moreover, applicants provided a declaration under 37 C.F.R. 1.132 confirming the activity of the compounds.

However, the office action argues that various of the indications listed in these two claims are "untreatable." Perhaps the office action confuses "treatment" with "cure". Treatment is, of course, amelioration of the indication, not necessarily complete eradication. Thus, since it is

known that various brain or spinal cord traumas, and eating disorders, can be improved, i.e., "treated" with drugs, it is submitted that the mere fact that these indications may be difficult to treat is not, *per se*, evidence of non-enablement as alleged in the office action. Moreover, applicants disagree with the specific example set forth in the office action of "untreatable" indications. For example, it is argued at page 3 that "no amount of serotonin increase will treat [eating disorders from reasons that are not biological, such as cultural family pressures]." However, it is well established that serotonin plays a key role in various emotional disorders, in which eating disorders from cultural or family pressure certainly qualify. Thus, there is reasonable basis to believe applicants' statement of enablement.

In the previous reply, applicants provided a variety of articles showing that compounds with SSRI activity are useful in the treatment of sexual dysfunction, various psychiatric disorders, spinal injuries, obsessive-compulsive disorder, Parkinson's disease, and other disorders including eating disorders. However, the Examiner argues, at page 4, that the literature provided, as it is post-filing material, can show only utility, not enablement *at the time the current application was filed*." Applicants submit that such a categorical rejection of the documents is incorrect. The use of post-filing evidence of enablement is well-established for demonstration that a disclosure was enabling *when filed*. See *In re Brana*, 51 F3d 1560 (Fed.Cir. 1995), where post-filing experimental data was employed to show that the application was enabled as of its filing date, i.e., that the applicants' assertion that the invention works, was true. In addition, it is well established that post-filing publications can show that one or ordinary skill in the art could have practiced the invention as of the filing date without undue experimentation, i.e., that the invention is enabled. See *Amgen Inc. v. Hoechst Marion Roussel, Inc.* 314 F3d 1313 (Fed.Cir. 2003), rehearing denied (Fed.Cir. 2003). See also *Plant Genetic Systems, N.V. v. Dekalb Genetics Corp.*, 315 F3d 1335 (Fed.Cir. 2003), in which the court explicitly approved the use of later publications as evidence of the state of the art existing on the filing date of an application.

As of the filing date of the present application, applicants have stated the compounds are useful to treat various indications. Thus, post-filing evidence that this claim is, in fact, true (the office action has not alleged that additional information as to *how* to treat these diseases is

required) is clearly a permissible use of post-published material to establish the *veracity* of applicant's claim of enablement. Thus, these materials must be considered.

Moreover, as further evidence of enablement at the time of filing, applicants provide additional articles with the present reply. These articles, all of which were published prior to the filing of the present application, show the use of 5-HT_{1A} receptor antagonists in the treatment of stroke, cerebral ischemia, Parkinson's disease, deficiencies of cognition, schizophrenia, obsessive-compulsive disorder, anxiety, eating disorders, sexual dysfunction, Alzheimer's disease, dementia, and sleeping disorders. These references provide even further evidence that applicant's claim of enablement is accurate, accepted by one of ordinary skill in the art, and that the compounds of the present claims are fully enabled for the indication set forth in the rejected claims. The attached references are summarized as follows:

a) In vitro and invivo correlation between 5-HT_{1A} activity and treatment of stroke, cerebral ischaemia
Semkova et al., Eur J Pharmacol 359, 251, 1998

b) In vivo correlation between 5-HT_{1A} activity and treatment of Parkinson's disease
Bibbiani et al., Neurology 57, 1829, 2001

c) In vivo correlation between 5-HT_{1A} activity and treatment of imparement in cognition
Sumiyoshi et al., Am J Psychiatry 158, 1722, 2001

d) Similar correlations are drawn for schizophrenia
Meltzer et al., Prog Neuro-Psychopharm Biol Psychiatry 27, 1159, 2003

e) In vivo correlation between 5-HT_{1A} activity and treatment of obsessive-compulsive disorder (OCD)
Dannon et al., Eur Neuropsychopharm 10, 165, 2000

f) Similar correlations are drawn for anxiety
Barrett and Vanover, Psychopharmacology 112, 1, 1993

g) Similar correlations are drawn for eating disorders
Brewerton, Psychoneuroendocrin 20, 516, 1995

h) In vivo correlation to sexual dysfunction
Hillegaart and Ahlenius, Br J Pharmacol 125, 1733, 1998

i) Similar conclusions are drawn for Alzheimer's disease/dementia

j) Similar conclusions are drawn for sleep/sleeping disorders
Monti and Monti, Life Sci 66, 1999, 2000

All claims of the application are submitted to be in condition for allowance. Accordingly, passage to issue is respectfully requested. However, should the Examiner have any questions or comments, he is cordially invited to telephone the undersigned at the number below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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